Course Introduction

Computer Systems Administration
TE2003

Practical Information

- 7.5hp freestanding course
  - Mandatory course in the Network Design and Computer Management programme 60 hp
  - Mandatory course in the IT-Forensics programme 120hp
- Examiner
  - Magnus Jonsson (magnus.jonsson@hh.se)
- Course responsible
  - **Mattias Wecksten** (mattias.wecksten@hh.se)
- Other faculty
  - Mattias Enervall (Lab assistant swedish group)
  - Zain Ul-Abdin (Lab assistant english group)
  - **Wagner Ourique de Morais** (wagner.demorais@hh.se)

Practical Information

- Course webpage
  - http://www.hh.se/te2003
  - **Course Material**
  - **Lab System**
    - **Register for Lab exercises and project topics**
- Course literature
  - **IT Essentials: PC Hardware and Software Companion Guide (4th Edition)**
    - **ISBN-10: 1-58713-263-X**
- Supplementary material
  - **Professor Messer's CompTIA A+ Training Course**
  - **Mike Meyers CompTIA A+ guide to managing and troubleshooting PCs**

Course overview

Main Topics

- Computing basics – an historical viewpoint
- Computer Hardware
  - Low level building blocks
    - CPU, power supply, RAM, BIOS, bus systems, storage…
  - Computer components and peripherals
    - General input/output, video, audio, networking, …
- Computer Software
  - Operating system basics
    - Installing/ Upgrading MS Windows
    - System Administration & Maintenance
    - Troubleshooting
    - Security

After finishing the course

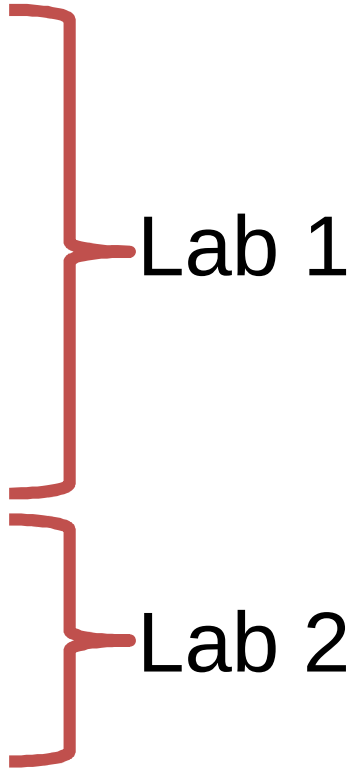
- Declarative knowledge
  - Briefly
    - EXPLAIN the functionality of the main hardware components in a computer
    - DISCUSS typical system administrative tasks
- Functioning knowledge
  - Independently
    - PERFORM:
      - Installation of hardware components in a computer
      - Installation of an operating system
      - Basic administrative tasks in an operating system
      - Identification and isolation of problems
    - SOLVE problems in faulty systems

Teaching and Learning Activities

- 12 Lectures
- 5 compulsory lab exercises
- Each student will elaborate 2 Multiple Choice Questions, including the answers, for each book chapter
  - Swedish group: mattias.wecksten@hh.se
  - English group: wagner.demorais@hh.se
- 1 mandatory seminar
  - Oral presentation and written report
- Written exam

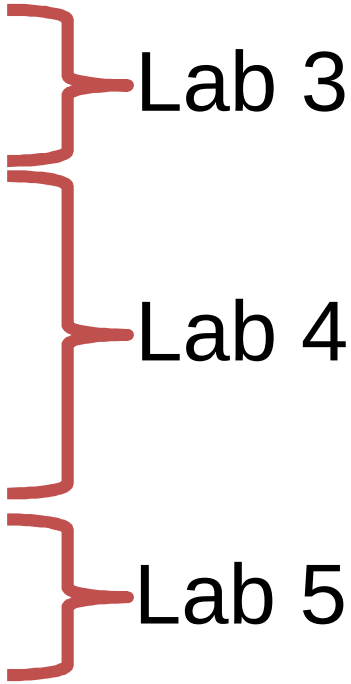
Lectures

- Lecture 1
  - Course introduction
  - Introduction to the PC (Ch. 1)
- Lecture 2
  - Safe lab procedures and tools use (Ch.2)
  - Computer assembly – Step by step (Ch. 3)
- Lecture 3 and 4
  - Advances Personal Computers (Ch. 11)
  - Hardware troubleshooting (Ch. 4)



Lectures

- Lecture 5 and 6
  - Operating systems (Ch. 5)
- Lecture 7
  - Computer Networks (Ch. 8)
- Lecture 8
  - Computer Security (Ch. 9)
- Lecture 9 and 10
  - Advanced Operating Systems (Ch. 12)



Lectures

- Lecture 11
  - Laptops and Portable Devices (Ch. 13)
  - Printers and scanners (Ch. 14)
- Lecture 12
  - Advanced Network (Ch. 15)
  - Advanced Security (Ch. 16)

Lab exercises

- Lab 1 - Computer assembling
  - Disassemble and assemble a PC
  - Identify and describe hardware components
- Lab 2 - Hardware maintenance and troubleshooting
  - Identify faulty components and fix hardware problems
- Lab 3 - Operating system
  - Install and configure MS Windowns
- Lab 4 - Software troubleshooting and advances configuration
  - Configure a network
  - Protect the system
- Lab 5 - Advanced operating system
  - Update, Optimize, CLI, Troubleshooting

Grading Criteria

- Lab exercises: **Pass or Fail**
- Hand-ins: **Bonus for the written exam**
- Seminar presentation and written report: **U (fail), 3, 4 or 5**
- Written exam: **U (fail), 3, 4 or 5**
- Final grade: **U (fail), 3, 4 or 5**
  - Grades combination
- Minimal requirements to PASS, i.e., final grade ≥ 3:
  - **All five** lab exercises: PASS
  - Written assignment and presentation: 3
  - Written Exam: 3

Advice for students

Please, switch you mobile to SILENT MODE

- Show up in time
  - Lectures
  - Lab exercises
- Read the course material
- Watch Professor Messer's Training Course videos

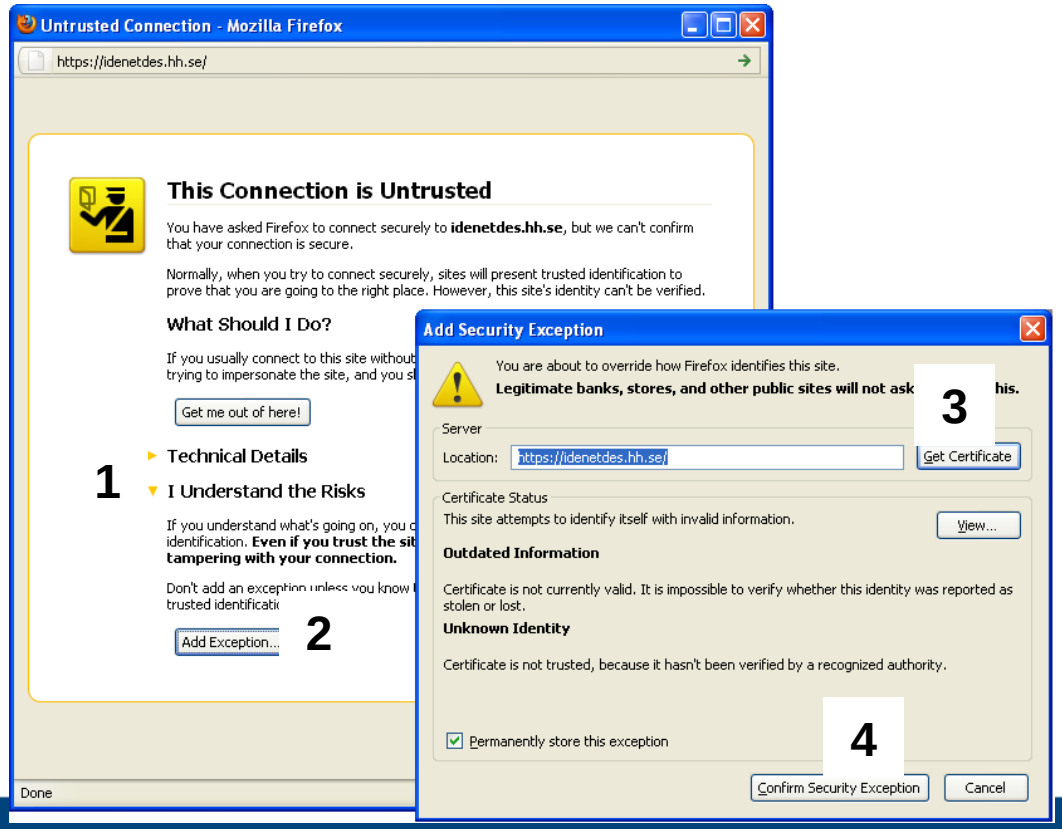
"Students must be the ones who perform activities to make learning happen. These activities will produce knowledge, enrich skills, change attitudes and make them acquire value"

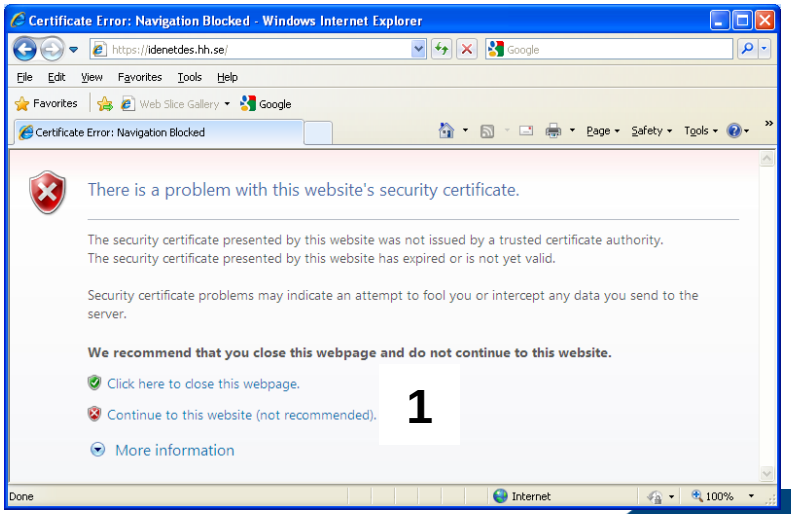
“I missed or failed examination”

- Written exam is given three times at given dates
- Project supervision: written report
- Project exam is given three times at given dates
- More info at the Course Description

How do I sign in for the Labs, project topics and project supervision?

- Step 1: https://idenetdes.hh.se/

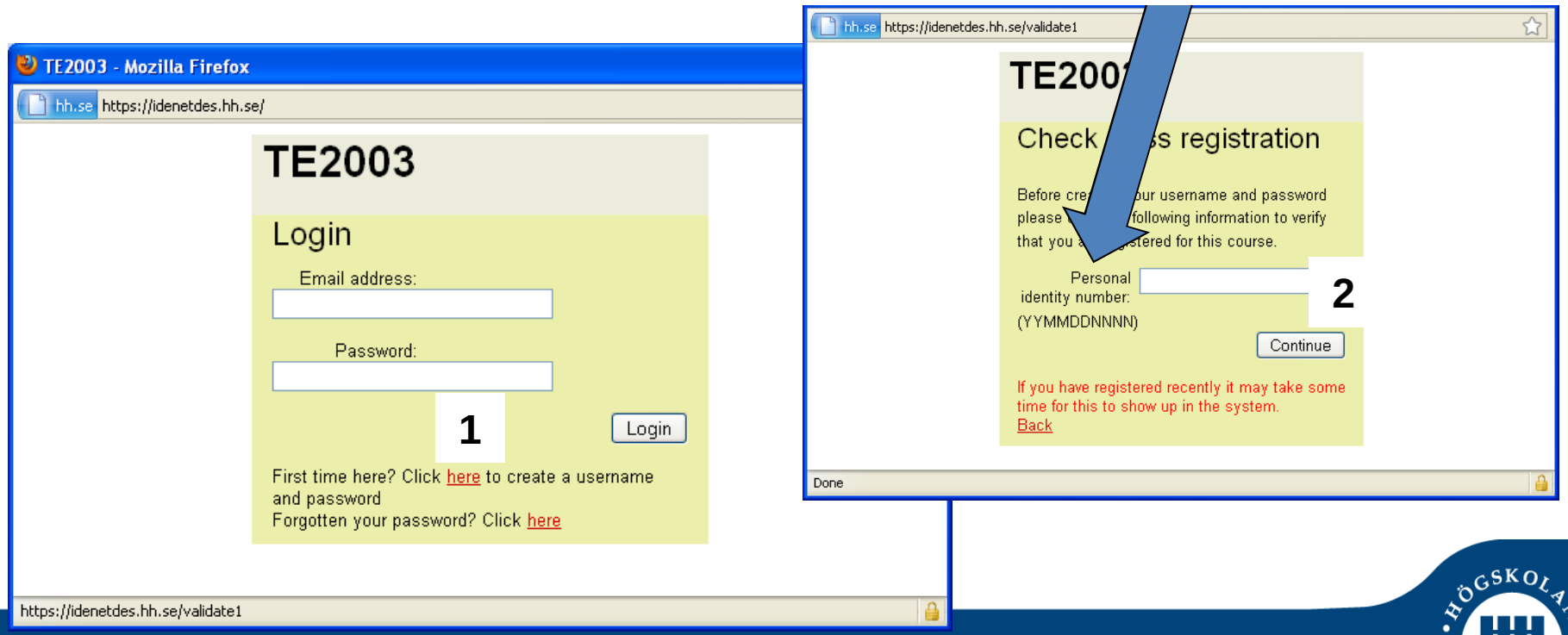




How do I sign in for the Labs and project topics?

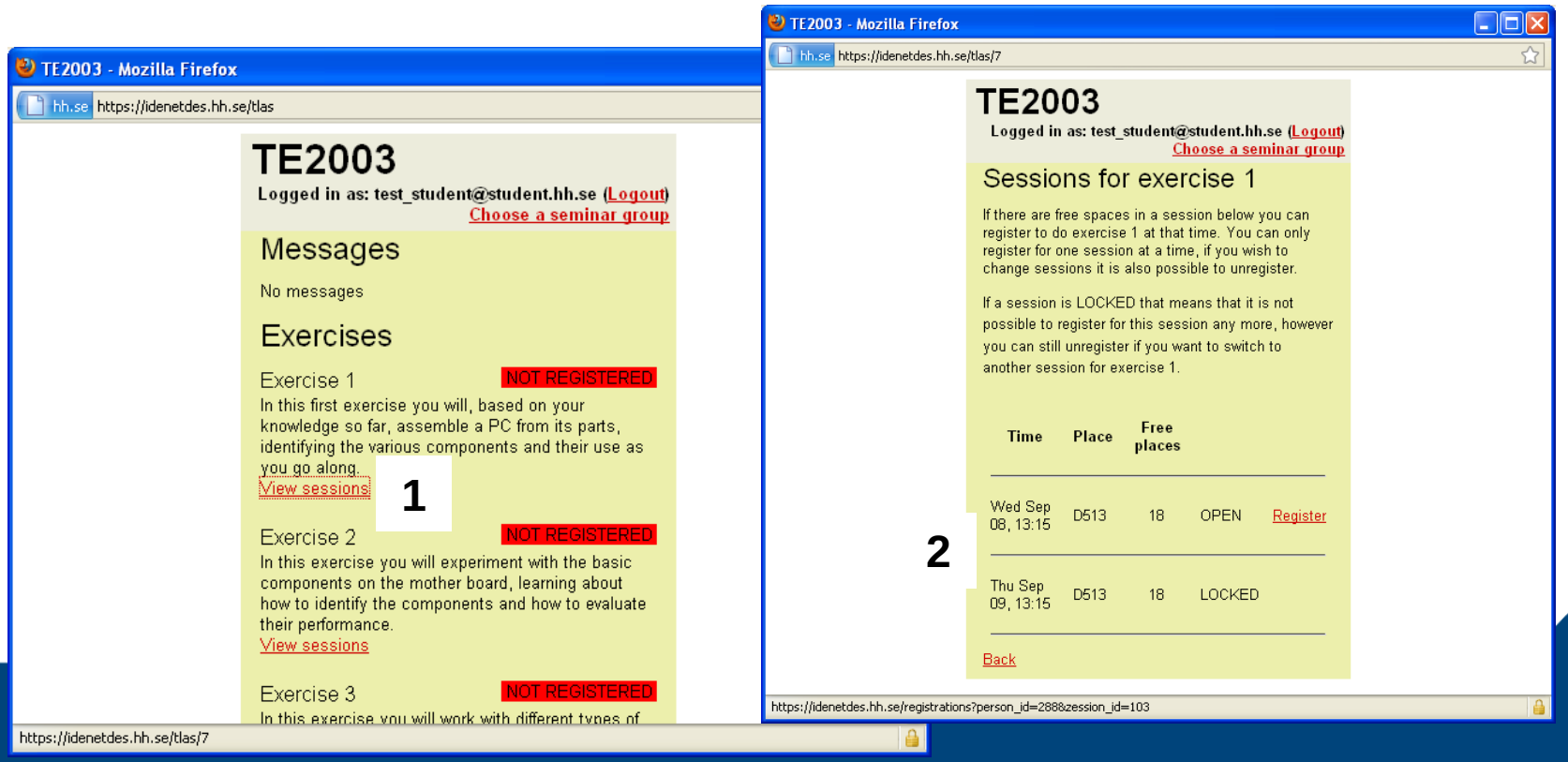
- Step 2
  - First Time

For security reasons, a code will be given to you instead



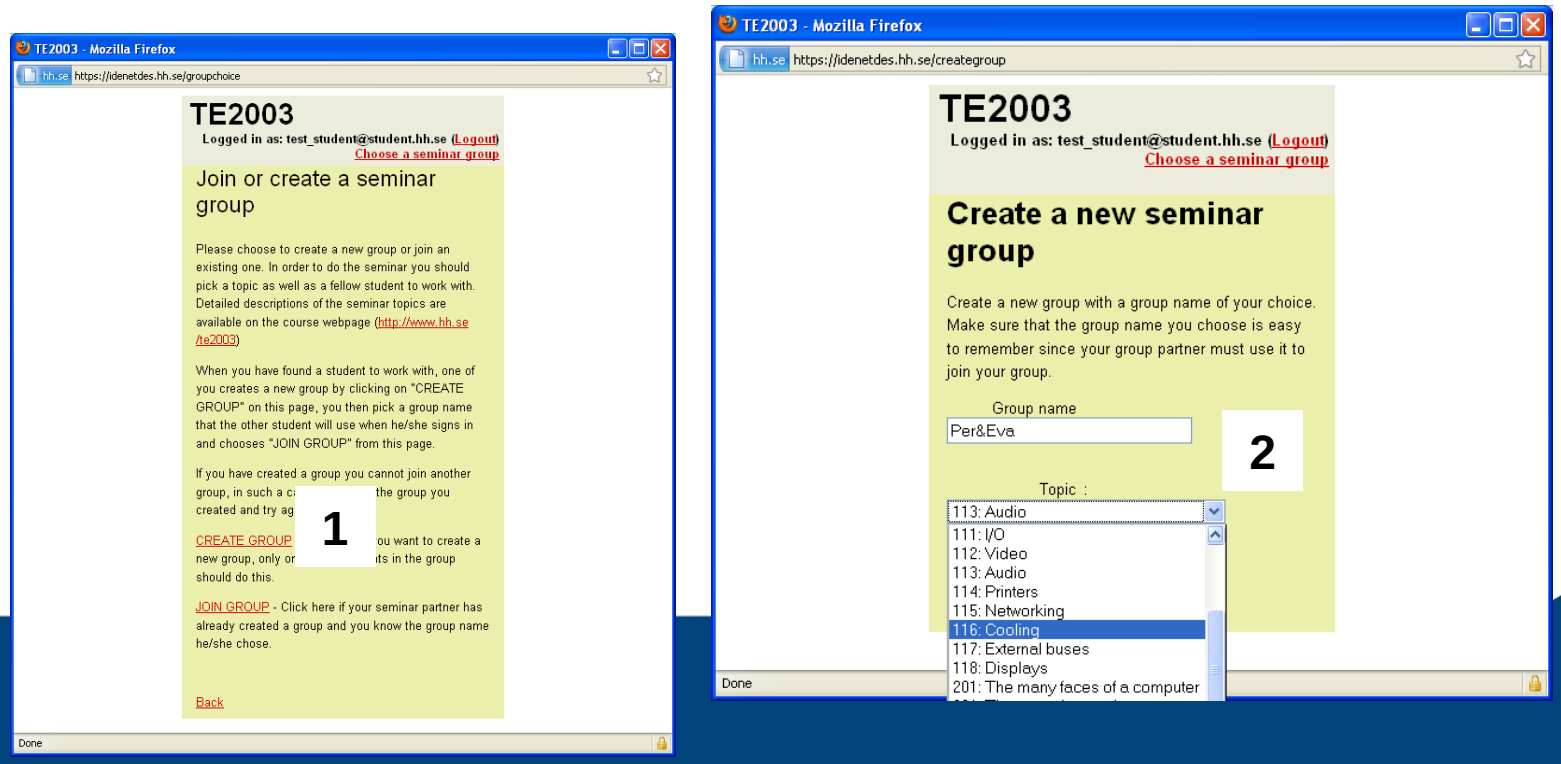
How do I sign in for the Labs?

- Step 3
  - Login, choose session and register



How do I sign in for a project topic?

- Step 1: A group member creates a group and informs a topic
  - 101 to 118 for the English group



How do I sign in for a project topic?

- Step 2: Another group member joins a group
  - Informs the Group name